

**REMARKS**

Reconsideration and allowance of this application, as amended, is respectfully requested.

This Amendment is in response to the Office Action dated July 12, 2005. By the present amendment, the original claims have been canceled and replaced by new claims 23-28 for clarifying the invention as will be discussed below. In addition, Figs. 29-31 have been designated as Prior Art. Accordingly, removal of the objection to the drawings set forth in paragraph 1 of the Office Action is respectfully requested.

Briefly, the present invention as defined by the newly submitted claims 23-28, is directed to features of the invention which can be appreciated from studying Fig. 4 (which falls within the elected group II of the invention as defined in the March 28, 2005 Restriction Requirement), particularly when taken in conjunction with the more detailed implementation of the IC chip structure shown in Fig. 16 and 17 (which chip structure was not subject to the Restriction Requirement and which can be used within the different listed embodiments from the Restriction Requirement). In particular, referring to Fig. 4, (noting that reference to Fig. 4 is solely for purposes of example and not intended to limit the invention only to this specific details of this figure), a wireless identification semiconductor device is provided which includes a chip 16 formed between a first conductor 14b and a second conductor 18b which constitute an antenna (e.g., see page 26, line 16 and 17 referring to Fig. 3 (nothing that Fig. 4 is a slight modification of Fig. 3 with regard to changing the shapes of the first and second conductors, as noted on page 27, line 5 et seq.)). As can also be seen in Fig. 4, and described on page 27, lines 7-10, a slit 22b is provided in the second conductor 18b. This slit 22b corresponds to the slit 22a in Fig. 3 provided as

a gap between the first and second conductors which, as noted in the last four lines of page 26, "is a slit necessary to match the impedance of the wireless IC chip and the antenna." More specifically, as noted in the paragraph overlapping pages 26 and 27 of the Specification:

"The impedance matching is not sufficiently achieved in the absence of the slit 22a, and so the energy from the antenna cannot efficiently be obtained. Therefore, the reduction of the communication distance is caused."

As such, the slit 22b shown in the example of Fig. 4 is also important for improving impedance matching between the wireless IC chip and the antenna.

An example of a particular structure for the IC chip can be seen in Figs. 16 and 17, and is defined by the newly presented independent claim 23. Specifically, as shown in the box 153, the chip can include a rectifier circuit including a first diode, a second diode and a capacitor.

Reconsideration and allowance of newly presented independent claim 23 and its dependent claims over the cited reference to Derbenwick (USP 6,900,053) is respectfully requested. As noted above, by the present Amendment, new independent claim 23 defines the features such as shown, for example, in Fig. 4 regarding the slit provided on one of the first and second conductors, in conjunction with the features shown in Fig. 16 regarding the details for connection of the IC chip to the first and second conductors through the first and second electrodes of the chip (see also Fig. 17 regarding details for the connection between the first and second electrodes and the chip elements). In particular, independent claim 23 specifically defines the formation of a slit on one of the first and second conductors with the other of the first conductor crossing over the slit and being coupled to the second conductors, together with the detailed connections specified in claim 23 between the

respective first and second electrodes and the capacitor and the first and second diodes. This clearly is neither taught nor suggested by Derbenwick. With regard to this, it is noted that Derbenwick is directed to a magnetic field type antenna utilizing electromagnetic coupling (for example, via a coil). As such, the arrangement defined by claim 23, including the use of the defined slit, is clearly neither taught nor suggested by Derbenwick. Therefore, reconsideration and allowance of independent claim 23 and its respective dependent claims is earnestly solicited.


In addition to the features of independent claim 23 discussed above, particular consideration of the features of dependent claims 24-28 is also respectfully requested. These claims define more specific arrangements concerning the construction of the first and second diodes and the capacitor, as well as the structure of the antenna formed by at least one of the first and second conductors as being a tabular dipole antenna. Again, these features are clearly neither taught nor suggested by Derbenwick. Therefore, particular consideration of these dependent claims over Derbenwick is also respectfully requested.

Reconsideration and removal of the obviousness type double patenting rejection based on claims of the copending application Serial No. 10/002,083 is also respectfully requested. Although applicants respectfully submit that the newly presented claims 23-28 of the present application clearly define a separate patentable invention from the invention defined in the copending application, in order to obviate this rejection to expedite the allowance of the application, applicants are filing a Terminal Disclaimer herewith. Therefore, entry of this Terminal Disclaimer and allowance of the application is respectfully requested.

If the Examiner believes that there are any other points which may be clarified or otherwise disposed of either by telephone discussion or by personal interview, the Examiner is invited to contact Applicants' undersigned attorney at the number indicated below.

To the extent necessary, Applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to the Antonelli, Terry, Stout & Kraus, LLP Deposit Account No. 01-2135 (Docket No. 843.42897X00), and please credit any excess fees to such deposit account.

Respectfully submitted,  
**ANTONELLI, TERRY, STOUT & KRAUS, LLP**

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# Appendix A

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## Appendix B

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**AMENDMENTS TO THE DRAWINGS**

Please replace originally filed drawing Figures 29, 30 and 31 with the attached Replacement Sheets as found in Appendix A. The three figures have now been labeled as 'Prior Art'.